

# A NEW SPECIES OF *COLUMNEA* (GESNERIACEAE) FROM THE CORDILLERA ORIENTAL OF COLOMBIA

## Una nueva especie de *Columnea* (Gesneriaceae) de la cordillera Oriental en los Andes colombianos

MARISOL AMAYA-MÁRQUEZ

Instituto de Ciencias Naturales, Universidad Nacional de Colombia, Apartado 7495, Bogotá  
D. C., Colombia. mamayam@unal.edu.co

### ABSTRACT

A new species of *Columnea* belonging to section *Collandra* (Gesneriaceae) is described and illustrated. The species is found in the Eastern Andes of Colombia (Cordillera Oriental), in the Departamento of Santander.

**Key words.** *Collandra*, *Columnea*, Gesneriaceae, Colombia, Santander, Taxonomy, Flora of Colombia.

### RESUMEN

Se describe e ilustra una nueva especie de *Columnea* perteneciente a la sección *Collandra* (Gesneriaceae). La nueva especie se encontró en el norte de la Cordillera Oriental en el departamento de Santander en Colombia.

**Palabras clave.** *Collandra*, *Columnea*, Gesneriaceae, Colombia, Santander, Taxonomía, Flora de Colombia.

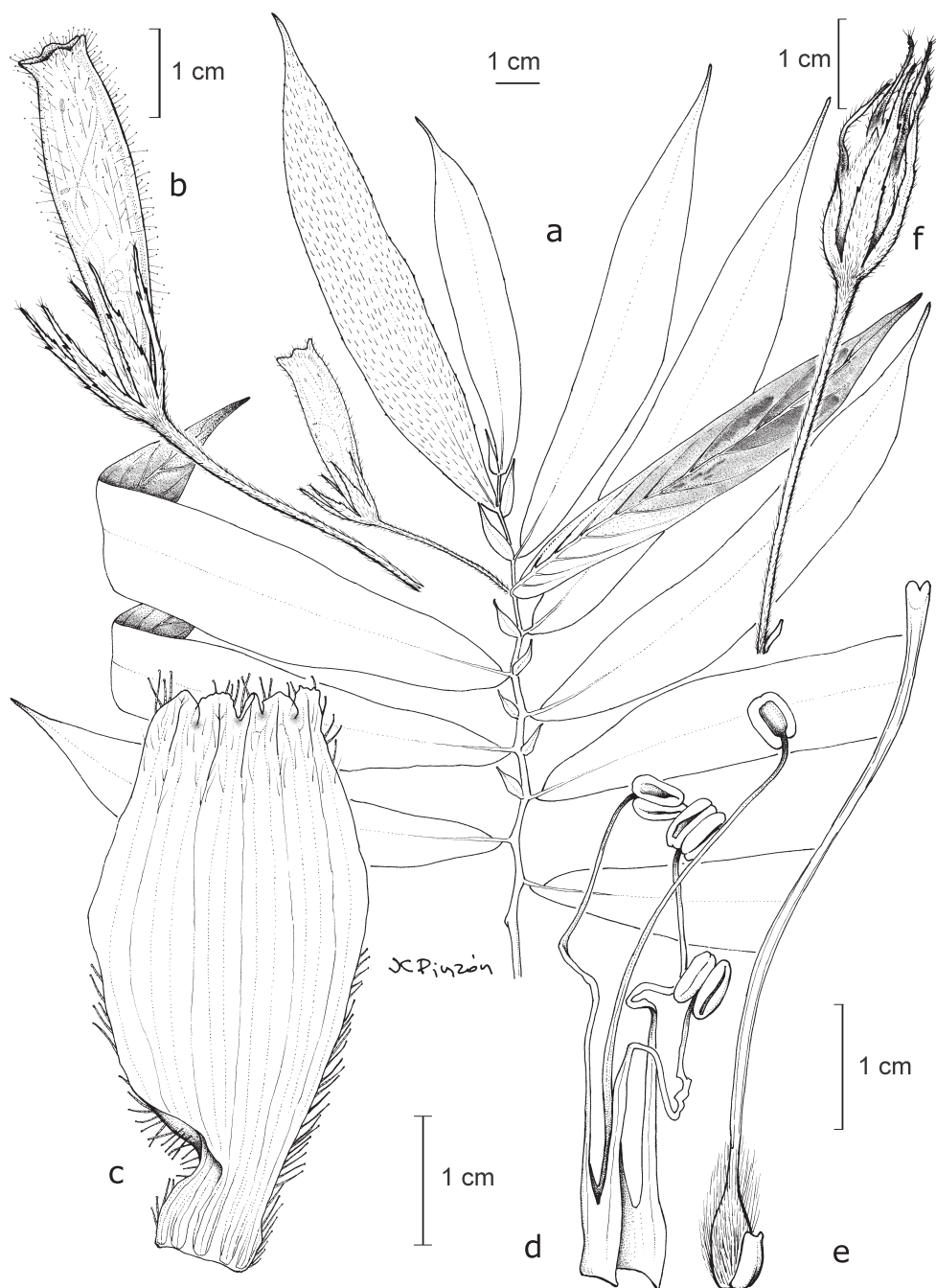
### INTRODUCTION

*Collandra* is the largest section within the genus *Columnea* L. (Kvist & Skog 1993) with 60 species recognized so far (Amaya-Márquez *et al.* en prep.). The species belonging to this section are recognized by having dorsiventral climbing shoots, leaves in each node very unequal in size -the smaller looking like a stipule and the larger of regular size with leaf blade usually oblanceolate. Additionally most species of section *Collandra* have purple or reddish marks on the abaxial side of the leaves producing distinctive patterns of taxonomic value to discriminate between species; these colored patterns on the leaves signal to the hummingbirds the presence of flowers (Morley 1973, 1974). Most often the inflorescences are hidden under the foliage

due to the dorsiventral orientation of the vegetative shoots, and often the corolla is covered by big bracts. In this paper I describe a new species of *Columnea* belonging to section *Collandra* (Gesneriaceae), which is unusual within the section by having lorate leaves, long pedicels, small bracts, and long cylindric corollas. The combination of these characters exposes flowers outside the foliage.

***Columnea* (*Collandra*) *skogii* M. Amaya, sp. nov.**

TYPE: COLOMBIA. **Santander:** municipio Suaita, inspección de policía San José de Suaita, camino al bosque de la fundación San Cipriano (6° 9' N, 73° 27' W), 1600 m alt., Nov. 8 1988, Galeano 6098 (holotype: COL). Figure 1.



**Figure 1.** *Columnea skogii* M. Amaya. **a.** Habit. **b.** Flower. **c.** Corolla dissected: outside pilose- glandular, inside glabrescent; lobes deltoid apically obtuse or acute. **d.** Androecium. **e.** Gynoecium and nectary. **f.** Fruit and bract.

A *Columnea ericae* Mansf. differt foliis loratis, floribus longe pedicellatis, bracteis minutis, corollis curtioribus cum, limbo subactinomorpho.

**Suffrutescent** vines; often branched; stem quadrangular, 0.2-0.5 cm diam., apically sericeous with 10-12 celled uniseriate trichomes, internodes 0.7-2 cm long. **Leaves** opposite, strongly anisophyllous in a pair, membranaceous; larger leaf sessile or shortly petiolate, petioles 0.1-0.3 cm long; blade asymmetrical, lorate 9.5-18 x 1.2-3 cm, base oblique, apex attenuate, margin slightly serrate, adaxially green, densely sericeous with 8-10 celled trichomes and with sparsely distributed white unicellular setulose hairs; abaxially green or reddish with contrasting deep purple in the apical half or two third (2/3) of the leaf, sericeous with 5-celled trichomes, more densely packed on the veins, 8-9 veins on the larger side of the blade; smaller leaf sessile, blade asymmetrical, lanceolate 1-2 x 0.3-0.7 cm, base oblique, apex attenuate, adaxially green, sericeous with 8 celled trichomes, veins obscure; abaxially golden sericeous with 5 celled trichomes. **Inflorescence** 1-2 flowers on the larger leaf axil; bracts 1-2, yellow, densely sericeous, lanceolate, 0.4-1 x 0.2-0.5 cm. **Flower** pedicelate, pedicel 3.5-5 cm long, densely sericeous. **Calyx** yellow-greenish; lobes 5, nearly free; lanceolate, 1.4-2.5 x 0.2-0.4 cm, margin dentate, two teeth each side, outside densely sericeous, inside glabrous. **Corolla** oblique in the calyx, yellow; cylindrical 3.5-3.7 cm long, constricted at the base 0.3 cm, 1 cm at the widest part in the upper half, constricted at the limb 0.7 cm; dorsally gibbous, gibbosity 0.4 x 0.5 cm; limb subactinomorphous slightly ampliate, lobes subequal 0.2-0.3 x 0.2 cm, deltoid apically obtuse or acute; outside pilose with 8-12 celled uniseriate hairs apically glandular, inside sparsely sericeous. **Androecium** of 4 stamens, filaments 2.7-

4.5 cm long, glabrous, basally connate 0.3 cm of their length forming a staminal blade. **Nectary** one dorsal bidentate gland. **Gynoecium** with the ovary ovoid 0.7 x 0.3 cm, densely sericeous; style 2.8-3.5 cm long, glabrous; stigma bilobulated. **Fruit** a green ovoid berry, 1.5 x 1 cm. **Seeds** brown 1 x 1 mm, elliptically striated.

**Etymology.** The species is named after Laurence Edgar Skog to whom this species is dedicated in acknowledgment of his great contribution to the knowledge and understanding of the Neotropical Gesneriaceae.

**Phenology:** Flowers and fruits recorded in May and November. This species possibly produces flowers and fruits all year round as do many other columneas. The fruit color information comes from a specimen's label which can lead to uncertainty about the fruit color at maturity.

**Distribution.** *Columnea skogii* is known only from the Andean forests in Colombia. The species was recorded on the East Cordillera at the Departament of Santander, between 1600-1900 m of elevation.

**Representative specimens:** COLOMBIA. **Santander:** Municipio de Suaita, corregimiento San José, Fundación San Cipriano, ca. 1650-1900 m, May 16 1998, *Betancur 7846* (COL); Corregimiento de Virolín, vereda Corbaraque, sitio Costilla de Fara, 1900 m, Oct. 29 2008, *Manjarrés 12* (UPTC).

**Distinctive features** The species is distinguished from the similar *C. ericae* Mansf., and *C. polyantha* (Whieler) L. E. Skog by having the larger leaf in a pair lorate. Additional characters that help to distinguish *C. skogii* from those species are presented in Table 1.

**Table 1.** Comparison of *C. skogii* with morphological similar species.

Character	<i>C. skogii</i> M. Amaya	<i>C. ericae</i> Mansf.	<i>C. polyantha</i> (Wiehler) L. E. Skog
Leaf texture	Membranaceous	Papyraceous	Chartaceous
Leaf shape	Lorate	Oblanceolate	Narrow oblong to oblanceolate
Leaf apex	Attenuate	Acuminate	Attenuate
Leaf margin	Teeth hidden by the indument	Teeth hidden by the indument	Teeth conspicuous
Leaf adaxial indument	Golden sericeous with sparsely setulose white hairs	Golden sericeous with sparsely setulose white hairs	Reddish hirsute
Leaf abaxial color pattern	Green or totally reddish with contrasting deep purple	Green with contrasting purple toward the apex	Green
Number flowers/ inflorescence	1-2	1-4	2-10
Bracts shape	Lanceolate	Oblanceolate	Ovate to oblanceolate
Pedicele length	3.5-4.5 cm	1.3-3 cm	2-4.5 cm
Pedicele indument	Sericeous	Sericeous	Hirsute
Calyx lobes's margin	Dentate	Inconspicuously serrate	Serrate-Teeth subulate
Corolla length	3.5- 3.7 cm	5-6.2 cm	4-4.3 cm
Corolla limb	Sub-actinomorphic	Bilabiate	Sub-actinomorphic
Distribution	<b>Colombia:</b> Cordillera Oriental, 1600-1990 m	<b>Colombia:</b> Amazon, Cordillera Oriental, 200-900 m. <b>Ecuador:</b> 450-1200 m. <b>Perú:</b> 400-700 m	<b>Panama:</b> Chiriquí, 1000-1300 m

**ACKNOWLEDGMENTS**

To the National University of Colombia for the opportunity to do research. To Juan Carlos Pinzón for the elaboration of the drawings. To Diego Giraldo-Cañas, Alaim Chautems, and an anonymous reviewer all of whose comments greatly helped improve the manuscript.

**LITERATURE CITED**

KVIST, L.P. & L.E. SKOG. 1993. The genus *Columnnea* (Gesneriaceae) in Ecuador. *Allertonia* 6: 327 – 400.

MORLEY, B. D. 1973. Ecological factors of importance to *Columnnea* taxonomy. In: Heywood, V. (ed.). *Taxonomy & Ecology* 265 – 281. Academic Press, New York.

MORLEY, B. D. 1974. Notes on some critical characters in *Columnnea* classification. *Ann. Missouri Bot. Gard.* 61:514-525.

Recibido: 27/08/2009  
Aceptado: 03/11/2009